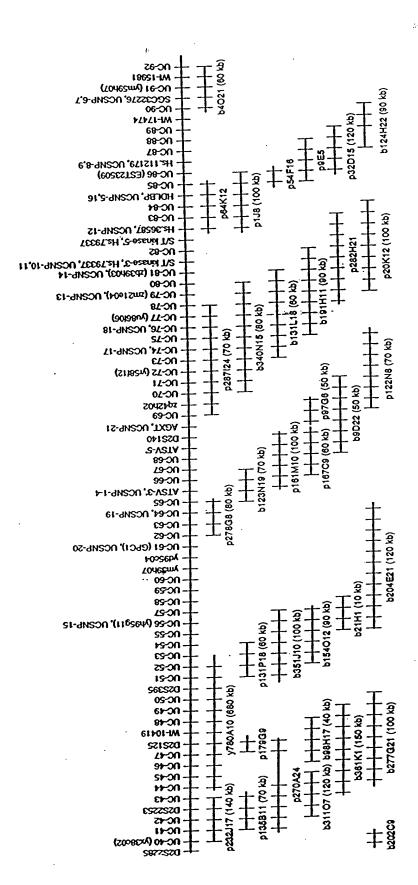


FIG. 1



Array ar

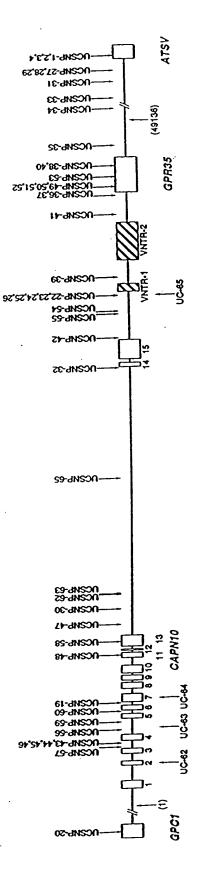
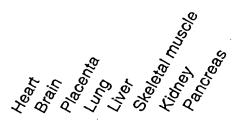


FIG.



kb 9.5 → 7.5 →

4.4 -

2.4 -

1.35 -

	Domain I Domain II
	HESCYKPTEDONYSALRODCRRRKYLFEDPLFPATDOSLYY-KGTPCPAVRKRPKGICEDPRLFYDG 67
CAPRIS	HIS VANTELAGITISALAÇOCHRICGLECOPTELPENDSLEFINILEGKVVMKRPQDISDDPHLIVON 67
CAPN6	NPTVISASVAPRTAAEPRSPCPVPRIPAQSKATEAGGCNPSGIYSAIISRNFPIIGVRENTFEQLHUKCLEXKVLYVDPEFPPDETSLFTSQNFPIQFWARPPEICENPRFIIDC 115 NPTVISASVAPRTAAEPRSPCPVPRIPAQSKATEAGGCNPSGIYSAIISRNFPIIGVRENTFEQLHUKCLEXKVLYVDPEFPPDETSLFTSQNFP
CAPN3	NETVISASVAPRTAAEPRSPCPVPHLPAGSKATEAGGCNPSGIYSAIISRRFFILOVALRIF EQUARACLEARCHIL VOE MASSLFYSERPQIPFWKRPGEIVKNPEFILG 83 HPYLYRAPGPQAHPVPKDARITHSSGGSFERRGECLERGTLFEDADFPASNSSLFYSERPQIPFWKRPGEIVKNPEFILG 83
LCAPN9	HPYLYRAPCPQAHPYP
CAPRIL	
CAPN2	
CAPNE	
	186 VISSKOLINGOVENENGALINAKASSIASRESIMQRVIPOHEEQEKOPRIKAÇAYAGIFHFHFNILG-HVOVVIDERLPTVNNQLIPCHSRSRNEFHCALVEKAYAKIAGCTQALIGCHTAIDIL 186
LCAPHS	ISSEDLIQCQVCNCNEVANCSSLASRESLNQRVIPDHEQENDPRINCAYNGIFHFRINGE-FOUNT UPLEAR TIMEDLAFSFSTSRIEFNRALLEKAYNILLGCTEALDGLTITDIIK 167 ISRHQLIQCRLCNKANISAFSCLAVQESHNTKAIPRHEQENDPRIPEKYAGIFHFRENHFCDHTEVVIDDILPTINGLYFTSSHRNEFNSALLEKAYNKLHGSYEALKOCNTTENHE 229
ECAPN6	Ishiquiqorlonkamisafsolavqeshmikaiprikoqendprepexyalffirfrahigentevvildoliptinoquafashikanerhekallekayalibosyealkochiteme 129 aurtdiqqelolomflaalacliluqullervip————————————————————————————————————
LCAPIC)	Aurtdicggelgdchflaalaclitagallfruir——Bdgsfieryagtfafgengeridenduviddeldtroplustabarrensalleaayagasytelikogsaleahe 197 Atridicggelgdchlaalaslitagaalarvir———Qdgsfgrgyagifafgengengebaldvuiddeldtroplustabarrensalleaayagasytelikogsaleahe 197
LCAPITY	ATRIDICQCELCOCMLAAIASLTINQKALARVIPQOQSECPCTACTERQEMQUESEMINVIDURE PER MORE PER SALEKAYAKWICSYEALSGCSTSEGFE 215 ATRIDICQCALCOCMLAAIASLTINDTLLERVVP
PCYSICI	ATRIDICQCALCOCMLAAIASLTINDTILIRVVP
bCAP#12	ATRIDICQCALGOCKLAALASLITAREILARVY?LRQSFQENTAGTFEROFMQTGENVEVVIDORLPTKNOQLLFLRSEGRIFVSALLEKAYAKIRGSTELVGGSTIEGFE 205 ATRIDIRQGGLGDCMLAALASLITARELLTRVLP
ECAPN8	ATRIDIRGOGLODOWILANIASLITARRILTRYLRROQSFORDIAGTFIRDEWQTUDWIDYLD LASCLORECTRIC RELIERVIAKYRGSYERUMAGQVADALIY 175 PRDGQVKQGLLGDCWFLCACAALQKSRRLLDQYIPPGQPSWADQETRGSFTCRIWQFGRWEVITDORLPCLAGRICFSRCQREDVFWLPLLEKVIAKYRGSYERUMAGQVADALIY 175
	TARTWFARLACYTAKCHAYAUTDV 256
LCAPICS	DETGGVSEPIDLTECDFANDETKRNQLFERHLAVHSRGGLISASIKAVTAADKEARLACGLAKGHAYAVTUV 256 DETGGLAEIIDHQKGRYTDLVEEXYKLFGELYKTFTKGGLICCSIESP
CAPRIE	DETCTLAETIDMOKCRYTDLVEEKYKLEGELYKTETKOGLICCSIESP
LCAPIO	DETCTLAET IDROKGRYTDLWERKYRLEGELYKTETGGLICGS IESP DETCGVAEFFETRD
BCAPNI	DETICONALITY IN SUPERIOR SET OF SUPERIOR SET O
LORDING	PERCELEGIFFICEPPPNLFKI I OKALONUSLAGES INT.
CAPN8	DFTCGISEFYDLAKPPENLYYI IQKALRKGSILGCSIDVS
PCYNIO	DILTCCIAERMILKGVAGSGCQQDRPGRMEHRTCRQLIALADQCLISCC
	t_ **Domain III
LCAPNS	RKVRLGGGLIAFFKSEKLDHIRLRHPMGEREMRGPMSDTSEEMQKVSKSERERGGTVUIDGEE WHIT ELVERIT ID ILLAV KITSAV KITSAV KONTON TOOL TOOL TOOL TOOL TOOL TOOL TOOL
mCAPH6	RKLRLGERLVEVFSTEKLYHVRLRNPLGRQEMSGPMSEISEEMQQLTVTDRRNTGLVMSDDGEF WISLEDF CHRIFTALLEICHLTADALQSDKLQTMTVSVNEGRMVRGCSA 444 DEVPF
HCAPK3	DEVPFKGEKVKLVRLRNPMCQVEMRCSMSDRMKIMSFYDKDEKARLCHIQVETEDGE WISTEDF THE INCIDENCE AND ASSOCIATION OF CONTROL
bCAPN9	DOYSFROQRIELIRIRNPMOQVEMNCSMSDSSPEMRSWGPADQRELCHTALDGEFMUFUH KAREUNVELTREICHLTEDALESRTIRKMTTLYECTWRRGSTA 381 KQVNYROQVVSLIRHRNPMGEVENTGAMSDSSSEMRWDPYERDQLRVKHE-DGEFMKFSDFIRHYSRLEICHLTEDALESRTIRKMTTLY
PCY5M1	KONYROVVSLIRHRNPWGEVENTGAMSDSSSEMRNUPPTERDGIRVINE-DGE WISHING BIKE! RICHARD TO THE WISHING THE WARREST TO THE WARREST THE PROPERTY OF TH
-CADMS	EEVESNGSLOKLIRIRNPWGEVENTGRWIDNCPSWNTIDPEERELITRRUE-DGEWISTSDE LARISAULERALFEUTERLECHTEN FORWARGSTA 171 EEVIF
LCAPNIA	EEVNFHGRPEKLIRLRNPMGEVENSCAMSINIPEMNYTIPPRRICEELDGKAE-DGEFWISESINILAGISKLEICHISSUSISSISSISSISSISSISSISSISSISSISSISSIS
	AND A SCHAME STREET STR
LCAPRIS	GCCINKDTFFQRPQYIFEVKKPEDEVLICIQQRPKRSTRRECKGENLAIGFDIYKVEERRQYTHHISLQHKAASSIYINSRSVFLRTDQPEGRYVIIPT 472
LCAPRIS ■CAPRIS	GOCINKEDTFFQREQYIFEVKKFEDEVLICIQQRPKRSTRRDCKGENLAIGFDIYKVEE
BCAPRS BCAPRS BCAPRS	COCINREDIFFORPOYIFEVERFEDEVLICIOGREPERSTEREDECENIAIGEDIYEVEEREQYRHESLQEKAASSIYINSRSVFLETDQFECRYVIIFT 472 COCINREDIFLORPOYIFTVFEDCH
BCAPRS BCAPRS BCAPRS	GCCINIKDTFFQNPQYIFEVKKPEDEVLICIQQRPKRSTRREDGGENLAIGFDIYKVEENRQYRHISLQHKAASSIYINSRSVFLRTDQPEGRYVIPF 472 GCCINREDTFLQNPQYIFTVFECH
bcaphs scaphs bcaphs hcaphs bcaphs	GOCINKEDTFERREQUITEVEREDEVLICIQUERESTREDIGENLAIGFDITEVEE
bcapns scapns bcapns hcapns bcapns bcapns	COCINENDIFFORPOTIFFVERPED
bcapns scapns bcapns hcapns bcapns bcapns	COCINENDIFFORPOTIFFVERFEDEVLICIOGREPERSTEREDIGENLAIGEDITEVE
ECAPHS ECAPHS ECAPHS ECAPHS ECAPHS ECAPHS ECAPHS	OCCINIENTIFEREQUITEVERED
ECAPHS ECAPHS ECAPHS ECAPHS ECAPHS ECAPHS ECAPHS	OCCINIENTIFEREQUITEVERED
bcaphs scaphs bcaphs bcaphs bcaphs bcaphs bcaphs	COCINIEDTFORPQYITEVERPED ——EVILCIOORPIRISTREDICENIAIGFDIYNVE——E—REQYRHRISL—QEKAASSIYINSRSVFLETDQFDCRYVIPI 472 COCINIEDTFORPQYITEVEDCH ——EVINSLQQEDLETTREMCREDRYIGFELFEVE——H—HEREFLERULYIQFEAGTSTTIDTRIVFLSKTLEKGSYVLVET 472 COCINFEDTFAINEQYRILLEEDD—DEDDSEV-ICSFLVALEQUERREKRIG-ASLFTIGFAIYEVPKERKGRK-QHLQUEFFLVINSKASKTITURREVSQHFLIPFSEYVIVES 547 COCINFEDTFAINEQYRILLEEDD—DEDDSEV-ICSFLVALEQUERREKRIG-ANVLITGTAITECP—DED—EHLNEFFRYMASRASSIFIRIREVSQHFLIPFGEYLLIFS 471 COCINTENTFAINEQYFLIRLEETDOPDUTCHES-CCSFVLALEQUERREKRIG-ANVLITGTAITECP—DED—EHLNEFFRYMASRASSIFIRIREVSDEFRLEPGEYVVVES 471 COCINTENTFAINEQYFLIRLEEDD—DEDGSS-CCSFVLALEQUERREKRIGH-E-DHRITGFGTYEVPELSQQTAHLASINFFLINEARERSDIFIRIREVSRHFLIPGEYTLIVPS 467 COCINTENTFAINEQYFLIRLEEDD—DEDGSS-CCTFVLLIGHQUERREKRIKG-DHRITGFGTYEVPELSGQTHHLASINFFLINEARERSDIFIRIREVSRHVEFGEYTLIVPS 467 COCINTENTFAINEQYFLIRLEEDD—DEDGSS-CCTFVLLIGHQUERREKRIKG-DHRITGFGTYEVPELSGQTHHLASINFFLINEARERSDIFIRIREVSSKVRLPFQQTILVVES 469 COCINTENTTAINEQYFLIRLDEVDEDGESTSEP-CCTVLIGHQUERREKRIKGL-DGSITSHTYQAVGLHLKVEKRRVNLPRVLSREPVAGTACHAYDREVHLECELSFGTYLAVPS 471 COCINTENTTAINEQYFLIRLEEDD—DDGSITSEP-CCTVLIGHQUERREKRIKGSHTSWSPASIBGRHYQAVGLHLKVEKRRVNLPRVLSREPVAGTACHAYDREVHLECELSFGTYLAVPS 471 COCINTENTTAINEQYFLIRLEEDD—DDGSITSEP-CTVLIGHQUERREKRIKGSHTSWSPASIBGRHYQAVGLHLKVEKRRVNLPRVLSREPVAGTACHAYDREVHLECELSFGTYLAVPS 471 COCINTENTTAINEQUERREKRIKGSHTSWSPASIBGRHYQAVGLHLKVEKRRVNLPRVLSREPVAGTACHAYDREVHLECELSFGTYLAVPS 471 COCINTENTTAINEQUERREKRIKGSHTSWSPASIBGRHYQAVGLHLKVEKRRVNLPRVLSREPVAGTACHAYDREVHLECELSFGTYLAVPS 471 COCINTENTTAINEQUERREKRIKGSHTSWSPASIBGRHYQAVGLHLKVEKRRVNLPRVLSREPVAGTACHAYDREVHLECELSFGTYLAVPS 471 COCINTENTTAINEQUERREKRIKGSHTSWSPASIBGRHYQAVGLHLKVEKRRVNLPRVLSREPVAGTACHAYDREVHLECELSFGTYLAVPS 471 COCINTENTTAINEQUERREKRIKGSHTSWSPASIBGRHYQAVGLHLKVEKRRVNLPRVLSREFALATHAYDREVHLEGALLSFGTYLAVPS 471 COCINTENTTAINEQUERREKRIKGSHTSWSPASIBGRHYQAVGLHLKVEKRRVNLPRVLSREFALATHAYDREVHLEGALLSFGTYLAVPS 471 COCINTENTTAINEQUERREKRIKGSHTSWSPASIBGRHYQAVGLHLKVEKRRVNLPRVLSREFALATHAYDRAGHRAYDREVHLEGALLSFGTYLAVPS 471 COCINTENTTAINEQUERREKRIKGSHTSWSPA
bcaphs scaphs bcaphs bcaphs bcaphs bcaphs bcaphs	GOCINKEDTFERREQUITEVERED ——EVLICIQUERESTEREDICIBLAIGFDIXVE——E—REQUERISL—QEKAASSIYINSESVFLETDQEDGRYVIIFT 472 GOCINEEDTFLINEQUITEVEECH — EVINSLQQUILATTEREGERENYIIGFELFEVE——H—REREREBULYIQERASSIYINSESVFLETURESSYVIVET 472 GOCENFEDTFWINEQUILLEEDD —DEDDSEV-ICSFLVALMQNEREREBREGL—ASTITIGEALTEVEREBREGNA—QHILQEDFFLYNASARSETTINEREVSQRFRLEPSETVIVES 553 GOCHRELDTFWINEQUILLEEDD — OPEDSEV-ICSFLVALMQNEREREBREG—ANVILTIGEALTEVEREBREGNA—QHILQENFFRANASARSETINLERESTEREPGETVLVES 471 GOCHRELDTFWINEQUILLEEDD — OPEDSEV—CSFLVALMQNERERERFG—ANVILTIGEALTEVER-PEUXOQNAVALREDFFLANASARSEDFILMEVSTERELPFGETVLVES 471 GOCHRIPATTWANGQUILLEEDD — OPEDGS—CCFFLVALMQNERERERFG—EDMETIGFAVTEVPPELVQQNAVALREDFFLANASARSEDFILMEVSTERELPFGETYLVVES 457 GOCINTECTIMINGQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTAGTAVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTAVTQIFFELESKIDHELGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTBGTRUMTQFKHLRKVERFVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITGTTUMTGFKCHATAGTAGATAGATAGATAGATAGATAGATAGATAGATAG
bcaphs scaphs bcaphs bcaphs bcaphs bcaphs bcaphs	GOCINKEDTFERREQUITEVERED ——EVLICIQUERESTEREDICIBLAIGFDIXVE——E—REQUERISL—QEKAASSIYINSESVFLETDQEDGRYVIIFT 472 GOCINEEDTFLINEQUITEVEECH — EVINSLQQUILATTEREGERENYIIGFELFEVE——H—REREREBULYIQERASSIYINSESVFLETURESSYVIVET 472 GOCENFEDTFWINEQUILLEEDD —DEDDSEV-ICSFLVALMQNEREREBREGL—ASTITIGEALTEVEREBREGNA—QHILQEDFFLYNASARSETTINEREVSQRFRLEPSETVIVES 553 GOCHRELDTFWINEQUILLEEDD — OPEDSEV-ICSFLVALMQNEREREBREG—ANVILTIGEALTEVEREBREGNA—QHILQENFFRANASARSETINLERESTEREPGETVLVES 471 GOCHRELDTFWINEQUILLEEDD — OPEDSEV—CSFLVALMQNERERERFG—ANVILTIGEALTEVER-PEUXOQNAVALREDFFLANASARSEDFILMEVSTERELPFGETVLVES 471 GOCHRIPATTWANGQUILLEEDD — OPEDGS—CCFFLVALMQNERERERFG—EDMETIGFAVTEVPPELVQQNAVALREDFFLANASARSEDFILMEVSTERELPFGETYLVVES 457 GOCINTECTIMINGQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTAGTAVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTAVTQIFFELESKIDHELGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTBGTRUMTQFKHLRKVERFVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITGTTUMTGFKCHATAGTAGATAGATAGATAGATAGATAGATAGATAGATAG
bcaphs scaphs bcaphs bcaphs bcaphs bcaphs bcaphs	GOCINKEDTFERREQUITEVERED ——EVLICIQUERESTEREDICIBLAIGFDIXVE——E—REQUERISL—QEKAASSIYINSESVFLETDQEDGRYVIIFT 472 GOCINEEDTFLINEQUITEVEECH — EVINSLQQUILATTEREGERENYIIGFELFEVE——H—REREREBULYIQERASSIYINSESVFLETURESSYVIVET 472 GOCENFEDTFWINEQUILLEEDD —DEDDSEV-ICSFLVALMQNEREREBREGL—ASTITIGEALTEVEREBREGNA—QHILQEDFFLYNASARSETTINEREVSQRFRLEPSETVIVES 553 GOCHRELDTFWINEQUILLEEDD — OPEDSEV-ICSFLVALMQNEREREBREG—ANVILTIGEALTEVEREBREGNA—QHILQENFFRANASARSETINLERESTEREPGETVLVES 471 GOCHRELDTFWINEQUILLEEDD — OPEDSEV—CSFLVALMQNERERERFG—ANVILTIGEALTEVER-PEUXOQNAVALREDFFLANASARSEDFILMEVSTERELPFGETVLVES 471 GOCHRIPATTWANGQUILLEEDD — OPEDGS—CCFFLVALMQNERERERFG—EDMETIGFAVTEVPPELVQQNAVALREDFFLANASARSEDFILMEVSTERELPFGETYLVVES 457 GOCINTECTIMINGQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTAGTAVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTAVTQIFFELESKIDHELGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTBGTRUMTQFKHLRKVERFVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITGTTUMTGFKCHATAGTAGATAGATAGATAGATAGATAGATAGATAGATAG
bcaphs scaphs bcaphs bcaphs bcaphs bcaphs bcaphs	GOCINKEDTFERREQUITEVERED ——EVLICIQUERESTEREDICIBLAIGFDIXVE——E—REQUERISL—QEKAASSIYINSESVFLETDQEDGRYVIIFT 472 GOCINEEDTFLINEQUITEVEECH — EVINSLQQUILATTEREGERENYIIGFELFEVE——H—REREREBULYIQERASSIYINSESVFLETURESSYVIVET 472 GOCENFEDTFWINEQUILLEEDD —DEDDSEV-ICSFLVALMQNEREREBREGL—ASTITIGEALTEVEREBREGNA—QHILQEDFFLYNASARSETTINEREVSQRFRLEPSETVIVES 553 GOCHRELDTFWINEQUILLEEDD — OPEDSEV-ICSFLVALMQNEREREBREG—ANVILTIGEALTEVEREBREGNA—QHILQENFFRANASARSETINLERESTEREPGETVLVES 471 GOCHRELDTFWINEQUILLEEDD — OPEDSEV—CSFLVALMQNERERERFG—ANVILTIGEALTEVER-PEUXOQNAVALREDFFLANASARSEDFILMEVSTERELPFGETVLVES 471 GOCHRIPATTWANGQUILLEEDD — OPEDGS—CCFFLVALMQNERERERFG—EDMETIGFAVTEVPPELVQQNAVALREDFFLANASARSEDFILMEVSTERELPFGETYLVVES 457 GOCINTECTIMINGQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTAGTAVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTAVTQIFFELESKIDHELGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTBGTRUMTQFKHLRKVERFVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITGTTUMTGFKCHATAGTAGATAGATAGATAGATAGATAGATAGATAGATAG
bcaphs scaphs bcaphs bcaphs bcaphs bcaphs bcaphs	GOCINKEDTFERREQUITEVERED ——EVLICIQUERESTEREDICIBLAIGFDIXVE——E—REQUERISL—QEKAASSIYINSESVFLETDQEDGRYVIIFT 472 GOCINEEDTFLINEQUITEVEECH — EVINSLQQUILATTEREGERENYIIGFELFEVE——H—REREREBULYIQERASSIYINSESVFLETURESSYVIVET 472 GOCENFEDTFWINEQUILLEEDD —DEDDSEV-ICSFLVALMQNEREREBREGL—ASTITIGEALTEVEREBREGNA—QHILQEDFFLYNASARSETTINEREVSQRFRLEPSETVIVES 553 GOCHRELDTFWINEQUILLEEDD — OPEDSEV-ICSFLVALMQNEREREBREG—ANVILTIGEALTEVEREBREGNA—QHILQENFFRANASARSETINLERESTEREPGETVLVES 471 GOCHRELDTFWINEQUILLEEDD — OPEDSEV—CSFLVALMQNERERERFG—ANVILTIGEALTEVER-PEUXOQNAVALREDFFLANASARSEDFILMEVSTERELPFGETVLVES 471 GOCHRIPATTWANGQUILLEEDD — OPEDGS—CCFFLVALMQNERERERFG—EDMETIGFAVTEVPPELVQQNAVALREDFFLANASARSEDFILMEVSTERELPFGETYLVVES 457 GOCINTECTIMINGQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTAGTAVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTAVTQIFFELESKIDHELGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTBGTRUMTQFKHLRKVERFVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITGTTUMTGFKCHATAGTAGATAGATAGATAGATAGATAGATAGATAGATAG
bcaphs scaphs bcaphs bcaphs bcaphs bcaphs bcaphs	GOCINKEDTFERREQUITEVERED ——EVLICIQUERESTEREDICIBLAIGFDIXVE——E—REQUERISL—QEKAASSIYINSESVFLETDQEDGRYVIIFT 472 GOCINEEDTFLINEQUITEVEECH — EVINSLQQUILATTEREGERENYIIGFELFEVE——H—REREREBULYIQERASSIYINSESVFLETURESSYVIVET 472 GOCENFEDTFWINEQUILLEEDD —DEDDSEV-ICSFLVALMQNEREREBREGL—ASTITIGEALTEVEREBREGNA—QHILQEDFFLYNASARSETTINEREVSQRFRLEPSETVIVES 553 GOCHRELDTFWINEQUILLEEDD — OPEDSEV-ICSFLVALMQNEREREBREG—ANVILTIGEALTEVEREBREGNA—QHILQENFFRANASARSETINLERESTEREPGETVLVES 471 GOCHRELDTFWINEQUILLEEDD — OPEDSEV—CSFLVALMQNERERERFG—ANVILTIGEALTEVER-PEUXOQNAVALREDFFLANASARSEDFILMEVSTERELPFGETVLVES 471 GOCHRIPATTWANGQUILLEEDD — OPEDGS—CCFFLVALMQNERERERFG—EDMETIGFAVTEVPPELVQQNAVALREDFFLANASARSEDFILMEVSTERELPFGETYLVVES 457 GOCINTECTIMINGQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTAGTAVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTVTQIFFELESKIDAHLGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVDEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTAVTQIFFELESKIDHELGEDFFLANGPSTCSSTIMBILEVSSRVELPFQYLLVVES 457 GOCHNITSGTRUMTQFKHLDEVEDQEGTS=P-CCTVLLGLAQNERERGREG—GOCINTSGTSTBGTRUMTQFKHLRKVERFVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITSGTRUMTQFKKHLRVSSEPSEVYLLVVQRSRLRADDGGGRARALVGDSHTSMSPASIBGRHYQAVGLHLMKVERRVNLPRVLSHPPVAGTACHAYDREVHLRCELSFGTYLAVFS 471 GOCHNITGTTUMTGFKCHATAGTAGATAGATAGATAGATAGATAGATAGATAGATAG
bCAPRS mCAPRS mCAPRS bCAPRS	GOCINKEDTFORPQYITEVKKPED
bCAPRS mCAPRS mCAPRS bCAPRS	COCINIENTIFENRO TIFEVER PULL LOGRENSTERECKERIALGEDITATE — HRQYRHRISL—QEKAASSITINSRSVFLRTDQFECRYVIPT 472 COCINIENTIFELORY TIFVEECH — KVIRSLOCKDLRTTRINGREDRITIGE LERVE — H. HRRFILBRULTIGERGTSTITURTY LSKILIKGSYVLVET 472 COCINFEDITATING OF THE PROPERTY LOCAL COCINFEDITATING PROPERTY LOCAL COCINFEDITATING OF THE PROPERTY LOCAL COCINFEDITATING OF THE PROPERTY LOCAL COCINFEDITATING PROPERTY LOCAL COCINFEDITATING OF THE PROPERTY LOCAL COCINFEDITATION OF THE PROPERTY LANGEST COCINFEDITATION OF THE PROPERTY L
bCAPRS	GCCINKIDITFQRQYITEVKIPED ——EVLICIQQRPRISTREDGGENLAIGFDIYKVE ——E—HRQYRHRISL—QRKAASSIYINSRSVFLRTDQPDGRYVIIFT 472 GCCINREDITFURQYITEVVECH ——EVIISIQQRDLATTREGGENLAIGFDIYKVE ——B —HRRFILBRULYIQGRAGTSTTIDTRIVFLSKTLAKGSYVLVET 472 GCCINREDITFURQYILLIEEDD —DPDDSEV-ICSFLVALAQRIBRERGRIG—ASSITIGRIFEVPKENGKK, QRLQCDFFLVNUSTARASTITINREVSQRFLIPPSEYVIVES 471 GCCINREDITMIRQQILLSLEEDD —DPDDSEV-ICSFLVALAQRIBRRERGRIG—ASSITIGRIFEVPKENGKK, QRLQCDFFLVNUSTARASTITINREVSQRFLIPPSEYVIVES 471 GCCINTENTHURQYGKLILLEEDD —DPDDSES—GCSFVLALAQRIBRRERGRIG—ASSITIGRIFEVEVPKENGKY, QRLQCDFFLANASRASEIFINREVSDRFLIPPGEYVLVES 471 GCCINTENTHURQYKLILLEEDD —DEDGES—GCTFLUGLIQKIRRRQRIBG—EDHRTIGFGITEVPFELSQQNINLISINFFLINRARFSDIF BURGVSTRFLIPPGEYVLVES 472 GCCINTENTHURQYKLILLEEDD —DEDGES—GCTFLUGLIQKIRRRQRIBG—EDHRTIGFGITEVPFELSQQNINLISINFFLINRARFSDIF BURGVSTRFLIPPGEYVLVES 473 GCCINTENTHURQYKLILLEEDDE—DEDGES—GCTFLUGLIQKIRRRQRIBG—EDHRTIGFGITEVPFELSQQNINLISINFFLINRARFSDIF BURGVSTRFLIPPGEYVLVES 474 GCCINTENTTURIQPGKIRLDEVDEDGES—GCTFLUGLIQKIRRRQRIBG—EDHRTIGFGITEVPFELSQQNINLISINFFLINRARFSDIF BURGVSTRFLIRFGEYILLVES 474 GCCRNN-SGFPSNPKFULRVSEPSVYLAVLQRSELRALDAGGRARLINGDSHTSWSPASIBGRHYQAVGIHLIKVVEKRRVNLPRVLSRPFVAGTARAYRREVILGELSFGTILAVPS 474 GCCRNS-SGFPSNPKFULRVSEPSVYLAVLQRSELRALDAGGRARLINGDSHTSWSPASIBGRHYQAVGIHLIKVVEKRRVNLPRVLSRPFVAGTARAYRREVILGELEKYL—510 TTEPHQGGETILRIFSEPVQULRELTLDRPHIS———MRALAGTFRVATQITVRAGCLEKKY—510 TTEPHQGGETILRIFSEPVQULRELTLDRPHIS———MRALAGTFRVATQITVRAGCLEKKY—510 TTEPHQGGETILRIFSEPVGHTISVRPVKKKKTKFI IFVSDRANSKRELGVDQESEEXGKTSPDKQKQSPQPGPGSDGSDQESEQQQFRRIFGQLOGMEICADELKVLAT 473 TTEPHQGGETILRIFSEPXATTVELDDQIQANLP————————————————————————————————————
bCAPRS	GOCINKEDTFERREYLIEVENCH ——EVLICIQORPRESTREDIXGENLAIGFDIXVE——E—NROYRHRISL—QEKAASSIXINSRSVFLRTDQPDGRYVIIFT 472 GOCINREDTFUNDOTTIVVENCH ——EVTISLQGENLATTREHGRENDITIGFELFIVE——H—HRRETHERLITIGERGASSIXINSRSVFLRTDQPDGRYVIIFT 472 GOCINREDTFUNDOTTIVVENCH ——EVTISLQGENLATTREHGRENDITIGFELFIVE—H—HRRETHERLITIGERGASSIXINSRSVFLRTBGRYVIVET 472 GOCINFEDTTWINDOTTILLEEDD—DEDDESV-ICSFLVALLAGRERERERGA-ASSLFTIGRAITEVENERGEK, QHLQRDFFLYNASKARSETTINREVSQRFRLPFGEYLLVES 471 GOCINFLITTWINDOTTILLEEDD—OPDDSEV-ICSFLVALLAGRERERGEG-ANVILIGFALTEVENERGEK, QHLQRDFFLYNASKARSETTINREVSQRFRLPFGEYLLVES 471 GOCINFLITTWINDOTTILLEEDD—OPDDSEV-ICSFLVALLAGRERERGEG-ANVILIGFALTEVENERGEK, QHLQRDFFLYNASKARSETTINREVSQRFRLPFGEYLLVES 471 GOCINFLITTWINDOTTILLEEDD—OPDDSEV-ICSFLVALLAGRERGREGG-ANVILIGFALTEVENERGEK, QHLQRDFFLANGSRAFGET INREVSTERFLPFGEYLLVES 471 GOCINFLITTWINDOTTILLEEDD—OPDDSEV-ICSFLVALAGRERGREGG-ANVILIGFALTEVPPELSQQTVILLSERDIF TURGWARREFLPFGEYLLVES 471 GOCINFLITTWINDOTTILLEEDD—OPDDSES-CTTLYGLIGHERRERGREGG-QUBLIGGATTEVPPELSQQTVILLSERDIF TURGWARREFLEFGEYLLVES 471 GOCINFLOTTWINDOTTILLEEDD—OPDDSESS-CTTLYGLIGHERRERGREGG-QUBLIGGATTAVTQIFFELSGTVILLGERFLIGREYSTER TURGWARREFLEFGETLIVES 471 GOCINFLOTTWINDOTTILLEEDD—OPDDSESTER CTVILLIGHERRERGARGAGGATATAVGDSHTSWSPASIBGRHYQAVGLHAWVERRIVALLERGFFLARGFFLARGARGAGGATATAVGREVARGAGGATATAVGDSHTSWSPASIBGRHYQAVGLHAWVERRIVALGARGAGARATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVGREVARGAGGATATAVG
bCAPRS	COCINIENTIFE, REVIEW OF THE PROPERTY OF THE PR
bCAPRIS mCAPRIS mCAPRIS hCAPRIS hCA	GCCINKIDITFQRQYITEVKKPED
bCAPHS mCAPHS mCAPHS bCAPHS bCAPHS	COCINIENTIFENROYITEVERCHEVILCIORRESTREDICIONICIES EN
bCAPRS	GCCINREDITFORPQYITEVKIPED ——EVLICIQORPRISTREDGGENLAIGFDIYNVE——E—RRQYRHRISL—QEKAASSIYINSRSVFLRTDQPDGRYVITFT 472 GCCINREDITFURPQYITEVVECH — EVIHSIQQEDIATTREGGENLAIGFDIYNVE——B—RRRFILBRUYIQGEAGTSTITUTRIVFLSKTLAKGSYVLVET 472 GCCINREDITFURPQYILITVEEDH —DPDDSEV-ICSFLVALAQRIBRERIRFG-ASSITIGRIFEVPKENGKA, QELQIDFFLYNASKARSTITINREVSQRFLIPFSEYVIVES 473 GCCINREDITMIRPQYKLKLEEDD —DPDDSEV-ICSFLVALAQRIBRERIRFG-ANVLIGTGAITEVPKENGKA, QELQIDFFLYNASKARSETFINREVSQRFLIPFSEYVIVES 473 GCCINTENTATHWIRPGYKLKLEEDD —DPDDSEV-ICSFLVALAQRIBRERIRFG-ANVLIGTGAITEVPKENGKA, QELQIDFFLYNASKARSETFINREVSDRFILPFGEYTLVES 473 GCCINTENTATHWIRPGYKLIKLEEDD —DEDGES —GCTFLVGLIQKRRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFRLPFGEYVVVES 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFLPFGEYVVVES 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFLPFGEYVVVES 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFLPFGGYTLAVPS 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRRNS—EDRRTGFGTTVAVQIFFLESHTDAHLGRBFLLARGESTSTRIRREVSSKRILPFGQYTLAVPS 459 GCCINTENTIMIRPGYKLIKLEEDD — DEDGES —GCTFLUGLIQKRRRRRRRNS—SPASIBGRHYQAVGIHLKVEKRRVNLPRVLSRPFVAGTACHAYRREVRLRCELSFGTTLAVPS 471 GCCHRTTANTIMIRPGYKLIKLEEDD — DEDGES —GCTFLUGLIQKRRRRRRRNS—— SPASIAGTPQUATGAHLKVEKRRVNLPRVLSRPFVAGTACHAYRRILFGGTTLAVPS 471 TTEPHQEGETLLRIFTSLAPPQLREDITINISHAMA GRANDAGRARLANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGAGARRALANGGARRALANGGARRALANGGARRALANGAG
bCAPRS	GCCINREDITFORPQYITEVKIPED ——EVLICIQORPRISTREDGGENLAIGFDIYNVE——E—RRQYRHRISL—QEKAASSIYINSRSVFLRTDQPDGRYVITFT 472 GCCINREDITFURPQYITEVVECH — EVIHSIQQEDIATTREGGENLAIGFDIYNVE——B—RRRFILBRUYIQGEAGTSTITUTRIVFLSKTLAKGSYVLVET 472 GCCINREDITFURPQYILITVEEDH —DPDDSEV-ICSFLVALAQRIBRERIRFG-ASSITIGRIFEVPKENGKA, QELQIDFFLYNASKARSTITINREVSQRFLIPFSEYVIVES 473 GCCINREDITMIRPQYKLKLEEDD —DPDDSEV-ICSFLVALAQRIBRERIRFG-ANVLIGTGAITEVPKENGKA, QELQIDFFLYNASKARSETFINREVSQRFLIPFSEYVIVES 473 GCCINTENTATHWIRPGYKLKLEEDD —DPDDSEV-ICSFLVALAQRIBRERIRFG-ANVLIGTGAITEVPKENGKA, QELQIDFFLYNASKARSETFINREVSDRFILPFGEYTLVES 473 GCCINTENTATHWIRPGYKLIKLEEDD —DEDGES —GCTFLVGLIQKRRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFRLPFGEYVVVES 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFLPFGEYVVVES 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFLPFGEYVVVES 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFLPFGGYTLAVPS 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRRNS—EDRRTGFGTTVAVQIFFLESHTDAHLGRBFLLARGESTSTRIRREVSSKRILPFGQYTLAVPS 459 GCCINTENTIMIRPGYKLIKLEEDD — DEDGES —GCTFLUGLIQKRRRRRRRNS—SPASIBGRHYQAVGIHLKVEKRRVNLPRVLSRPFVAGTACHAYRREVRLRCELSFGTTLAVPS 471 GCCHRTTANTIMIRPGYKLIKLEEDD — DEDGES —GCTFLUGLIQKRRRRRRRNS—— SPASIAGTPQUATGAHLKVEKRRVNLPRVLSRPFVAGTACHAYRRILFGGTTLAVPS 471 TTEPHQEGETLLRIFTSLAPPQLREDITINISHAMA GRANDAGRARLANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGAGARRALANGGARRALANGGARRALANGGARRALANGAG
bCAPRS	COCINIENTIFENROYITEVERCHEVILCIORRESTREDICIONICIES EN
bCAPRS	GCCINREDITFORPQYITEVKIPED ——EVLICIQORPRISTREDGGENLAIGFDIYNVE——E—RRQYRHRISL—QEKAASSIYINSRSVFLRTDQPDGRYVITFT 472 GCCINREDITFURPQYITEVVECH — EVIHSIQQEDIATTREGGENLAIGFDIYNVE——B—RRRFILBRUYIQGEAGTSTITUTRIVFLSKTLAKGSYVLVET 472 GCCINREDITFURPQYILITVEEDH —DPDDSEV-ICSFLVALAQRIBRERIRFG-ASSITIGRIFEVPKENGKA, QELQIDFFLYNASKARSTITINREVSQRFLIPFSEYVIVES 473 GCCINREDITMIRPQYKLKLEEDD —DPDDSEV-ICSFLVALAQRIBRERIRFG-ANVLIGTGAITEVPKENGKA, QELQIDFFLYNASKARSETFINREVSQRFLIPFSEYVIVES 473 GCCINTENTATHWIRPGYKLKLEEDD —DPDDSEV-ICSFLVALAQRIBRERIRFG-ANVLIGTGAITEVPKENGKA, QELQIDFFLYNASKARSETFINREVSDRFILPFGEYTLVES 473 GCCINTENTATHWIRPGYKLIKLEEDD —DEDGES —GCTFLVGLIQKRRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFRLPFGEYVVVES 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFLPFGEYVVVES 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFLPFGEYVVVES 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRRNS—EDRRTGFGTTGAVTEVPFELSQQNHULSINFFLINRARFSDIF BUREVSTRFLPFGGYTLAVPS 459 GCCINTENTIMIRPGYKLIKLEEDD —DEDGES —GCTFLUGLIQKRRRRRRNS—EDRRTGFGTTVAVQIFFLESHTDAHLGRBFLLARGESTSTRIRREVSSKRILPFGQYTLAVPS 459 GCCINTENTIMIRPGYKLIKLEEDD — DEDGES —GCTFLUGLIQKRRRRRRRNS—SPASIBGRHYQAVGIHLKVEKRRVNLPRVLSRPFVAGTACHAYRREVRLRCELSFGTTLAVPS 471 GCCHRTTANTIMIRPGYKLIKLEEDD — DEDGES —GCTFLUGLIQKRRRRRRRNS—— SPASIAGTPQUATGAHLKVEKRRVNLPRVLSRPFVAGTACHAYRRILFGGTTLAVPS 471 TTEPHQEGETLLRIFTSLAPPQLREDITINISHAMA GRANDAGRARLANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGGARRALANGAGARRALANGGARRALANGGARRALANGGARRALANGAG
bCAPHS mCAPHS mCAPHS bCAPHS bCAPHS	COCHRECTIFEREQUIFEVERED———EVLICIOQRERESTREDGENIAIGEDITAVE——E—HEQTRIBISL—QEKAASSITINSRSVFLETDQPDCRIVITIF 472 COCHREDTFOREQUIFTVEDCH———KVHISLQCDLRITERHCREPRIVIGEELEKVE——H—HERFELUNGARASSITINSRSVFLETDQFDCRIVIVES 553 COCHREDTFOREQUIFTVEDCH——EVHISLQCDLRITERHCREPRIVIGEELEKVE——H—HERFELUNGARASSITINSRSVFLERGERIPSECTIVES 553 COCHREDTFOREQUIFTUREDD—DEDDSEV-ICSFLVALLQCBERKLAREL—ASLFITGALTEVERENGOW, QULQKDFFLINARASAASTITINBEVSORFELPRECTIVES 553 COCHREDTFOREQUIFTUREQUIFTUREDD—DEDDSEV-ICSFLVALLQCBERKLAREL—ANVAITGALTECE—DED—BILANDFFRYKASRASSITINBEVSORFELPRECTIVES 453 COCHREDTFOREQUIFTUREQUIFTUREDDEDD —DEDGES—CCSFLVALLQCBERRERGRENG—CHREITGGTATEVERPELSQQNIULKDEFLANGARASSITINBEVSORFELPRECTILLPS 453 COCHRETATIVANEQFKIRLDEUDOPDDYGDEES—CCSFLVALLQCBERRERGRENG—CHREITGGTATEVERPELSQQNIULKDEFLANGARASSITINBEVSORFELPRECTILLPS 454 COCHRETATIVANEQFKIRLDEUDOPDDYGDEES—CCSFLVALLQCBERRERGRENG—CHREITGGTATEVERPELSQQNIULKDEFLANGARASSITINBEVSORFELPRECTILLPS 454 COCHRETATIVANEQFKIRLDEUDOPDDYGDEES—CCSFLVALLQCBERRERGRENG—CHREITGGTATEVERPELSQQNIULKDEFLANGARASSITINBEVSORFELPRECTILLPS 454 COCHRETATIVANEQFKIRLDEUDOPDDYGDEES—CCSFLVALLQCBERRERGRENG—CHREITGGTATEVERPELSQQNIULKDEFLANGARASSITINBEVSORFELPRECTILLPS 454 COCHRETATIVANEQFKIRLDEUDOPDDYGDEES—CCTFLVALLQCBERRERGRENGARASTERSTEGGTATEVERPELSGATILLGEBEFLANGARANAGARAALVGOSHTSWSPASIBGEHYQAVGILHKVEKRRVALPRVLSARPVAGTACHATAVARCHATEVERSTRIALDEUDOPDALAKVERTRURGESTARVARTATURE 454 COCHRETATIVANGARASTERSTRIALDEUDOPDALAKVERTRURGESTARVARTATURE ——PREFTP—POQUETEEDREFRALFEQUAGEDELIANDALVANGARASTERSTRIALDEUDOPDALAKVERTRURGESTARVARTATURE ——PREFTP—COCHRETERRATIVANGARASTERSTRIALDEUDOPDALAKVERTRURGESTARVARTATURE 454 TTERREGDEFLIKVETSERNALTERDORGRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTRURGARASTERSTRIALDEUDOPALAKVERTR
bCAPRS mCAPRS mCAPRS hCAPRS	COCHRECTIFERED - EVILCIOGRERSTREDGERIAIGFDIXVE - E-HEQYERISL-QEKAASSITINSRSVFLRTDQEDGRYVIIF 472 COCHREDTFUREQUETTYPEDGR - KYHSLQEDIRTTREGGERIAIGFDIXTVE - E-HEQYERISL-QEKAASSITINSRSVFLRTDQEDGRYVIIF 472 COCHREDTFUREQUETTYREDGR - KYHSLQEDIRTTREGGERONYIIGFELFAVE - H-REFLIRILVIQERGTSTITIDTRIVETSKTLKGSTYLVET 575 COCHREDTFUREQUETTYREGGERONYIIGFELFAVE - H-REFLIRILVIQERGTSTITIDTRIVETSKTLKGSTYLVET 575 COCHREDTFUREQUETTYREGGERONYIIGFELFAVELGERONYIIGFELFAVEL - H-REFLIRILVIQERGTSTITIDTRIVETSKTLKGSTYLVET 575 COCHREDTFUREQUETTHREGGERONG - CENTALANGERGRANG - AMILIGALTEC - DAD - ELLARDEFRANGRANGTRIALESDEFILBETSDERVING 497 COCHREDTFUREQUETTIALEEDE - DEDGES - CCTYLLIGHERREGRANG - CHRITIGGI TEVERDER SANGERANGET LANGERFARE LEPGETILVES 497 COCHREDTFUREQUETTIALEEDE - DEDGES - CCTYLLIGHERREGRANG - COCHREGGERONYILGENET-LANGERFARE LEPGETILVES 497 COCHREGTIALEEDE - DEDGES - CCTYLLIGHERREGRANG - COCHREGGERONYILGENET-LANGERFARE LEPGETILVES 497 COCHREGTIALEEDE - INDURANGERHALDONG RABANGGRANGARALANG CHRITIGGI TERGET LANGERFARE LEVER FURE LEPGET LANGERFARE LEVER FUR LEVER
bCAPRS	COCINIONTIFFORPOTIFFVEEDS——EVLICIOORPERSTERDEXCENIAIGFDIXVE——E—REQUERISL—QUEARASSITINGSVEETIQDEDEXTURE 122 COCINEDITE QUE TIVE COCINEDITE QUE TO THE COCINEDITE QUE TO THE COCINEDITE QUE TIVE COCINEDITE COCINEDITA COCINEDIT
bCAPRS bC	COCINICATIFFORPOYITEVEXED——EVLICIQORPERSTERDIXGENIAIGFDIXVE——E—REQUESIS—QUEALSSIYINGSVELRIDQPDCRYVIIPT 412 COCTREDITEQUESITIVEDCH——EVLICIQORPERSTERDIXGENIAIGFDIXVE——E—REQUESIS—QUEALSSIYINGSVELRIDQPDCRYVIIPT 412 COCRREDITEQUESITIVEDCH—ODEDSEV-ICSFLVALEQUERREPREDIX-EXITTIGATIFEVE—BUCARE—BURGEFFIXASEASSITIMEREPSORFELIPSETIVIVES 533 COCRREDITEGUESITURIPQUESITEDCH—ODEDSEV-ICSFLVALEQUERREPREDIX-ASTITIMEREPSORFELIPSETIVIVES 533 COCRREDITEGUESITURIPQUESITEDCH—ODED—COSTIVALEQUERREPREDIX—ANTIGATIFEVE—BUCARE BURGEFFIXASEASSITIMEREPSORFELIPSETIVIVES 433 COCRREDITEGUESITURIPQUESITEDCHOODEDSEVORES—COSTIVALEQUERREPREDIX DENTITIOPPELIXQQAVILLEDED FIXASEASSITIMEREVSIREFILIPSETIVIVES 434 COCRREDITEGUESITURISEDCH—ODEDCES—COSTIVALEQUERREPREDIC DENTITOPPELIXQQAVILLEDET FIXASEASSITIMEREVSIREFILIPSETIVIVES 434 COCRREDITEGUESITIMERED FIXASEASSITIMEREVSIREFILIPSETIVIVES 434 COCRREDITEGUESITIMERED FIXASEASSITIMEREVSIREFILIPSETIVIVES 434 COCRREDITEGUESITIMERED FIXASEASSITIMEREVSIREFILIPSETIVIVES 434 COCRREDITEGUESITIMERED FIXASEASSITIMEREVSIREFILIPSETIVITY 434 COCRREDITEGUESITIMERED FIXASEASSITIMEREVSIREFILIPSETIVITY 434 COCRREDITEGUES CONTRACTOR CONTRA
bCAPIS bCAPIS	COCHREDITFORPOTTEVATED
bCAPIS bCAPIS	COCINICATIFFORPOYITEVEXED——EVLICIQORPERSTERDIXGENIAIGFDIXVE——E—REQUESIS—QUEALSSIYINGSVELRIDQPDCRYVIIPT 412 COCTREDITEQUESITIVEDCH——EVLICIQORPERSTERDIXGENIAIGFDIXVE——E—REQUESIS—QUEALSSIYINGSVELRIDQPDCRYVIIPT 412 COCRREDITEQUESITIVEDCH—ODEDSEV-ICSFLVALEQUERREPREDIX-EXITTIGATIFEVE—BUCARE—BURGEFFIXASEASSITIMEREPSORFELIPSETIVIVES 533 COCRREDITEGUESITURIPQUESITEDCH—ODEDSEV-ICSFLVALEQUERREPREDIX-ASTITIMEREPSORFELIPSETIVIVES 533 COCRREDITEGUESITURIPQUESITEDCH—ODED—COSTIVALEQUERREPREDIX—ANTIGATIFEVE—BUCARE BURGEFFIXASEASSITIMEREPSORFELIPSETIVIVES 433 COCRREDITEGUESITURIPQUESITEDCHOODEDSEVORES—COSTIVALEQUERREPREDIX DENTITIOPPELIXQQAVILLEDED FIXASEASSITIMEREVSIREFILIPSETIVIVES 434 COCRREDITEGUESITURISEDCH—ODEDCES—COSTIVALEQUERREPREDIC DENTITOPPELIXQQAVILLEDET FIXASEASSITIMEREVSIREFILIPSETIVIVES 434 COCRREDITEGUESITIMERED FIXASEASSITIMEREVSIREFILIPSETIVIVES 434 COCRREDITEGUESITIMERED FIXASEASSITIMEREVSIREFILIPSETIVIVES 434 COCRREDITEGUESITIMERED FIXASEASSITIMEREVSIREFILIPSETIVIVES 434 COCRREDITEGUESITIMERED FIXASEASSITIMEREVSIREFILIPSETIVITY 434 COCRREDITEGUESITIMERED FIXASEASSITIMEREVSIREFILIPSETIVITY 434 COCRREDITEGUES CONTRACTOR CONTRA

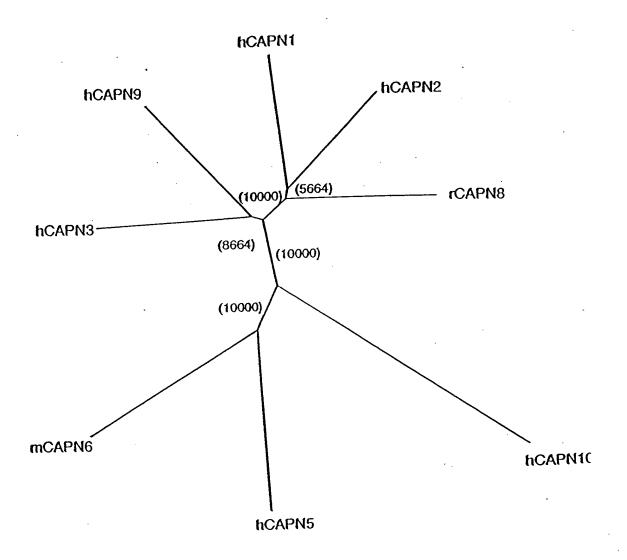
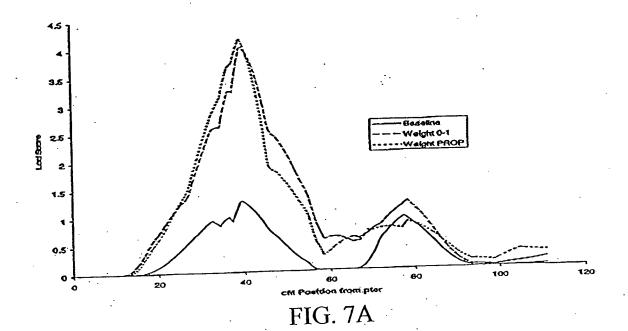


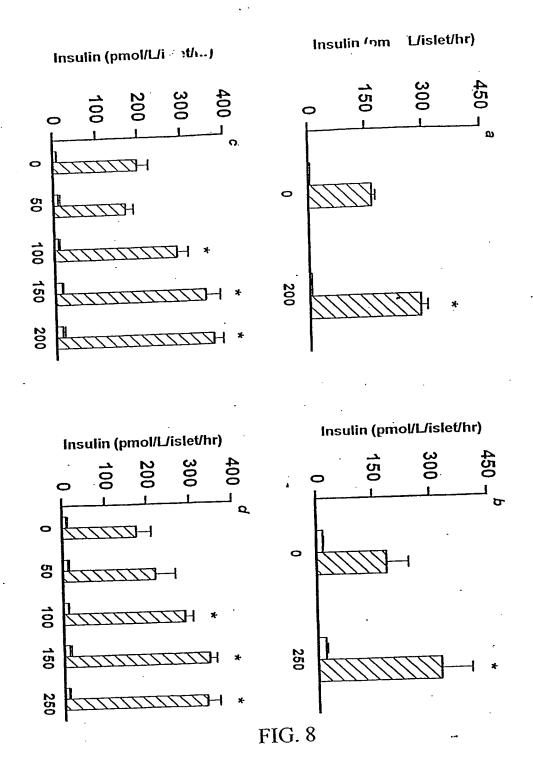
FIG. 6

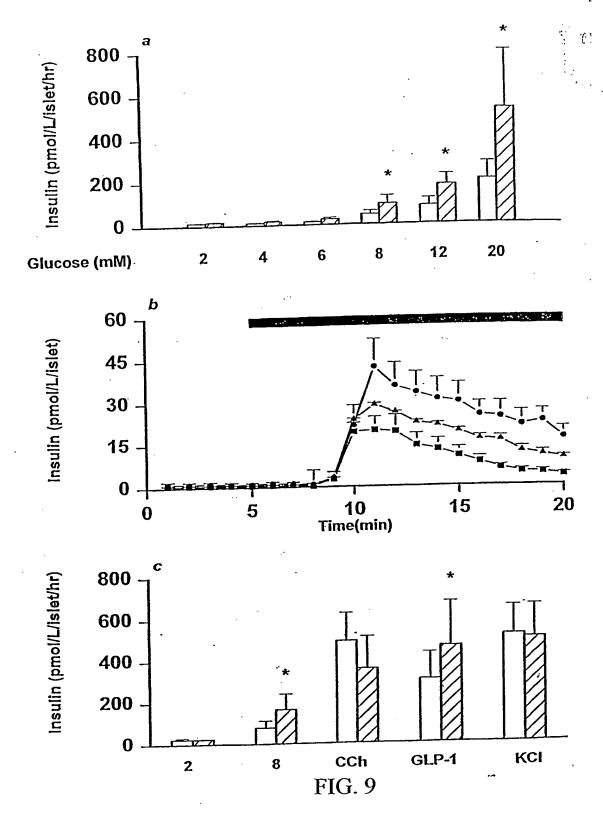


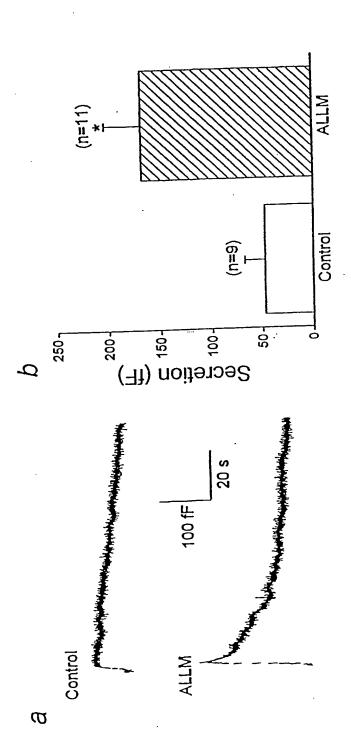
T - Basedina - - - Weight 0-1 - - - Weight PROP

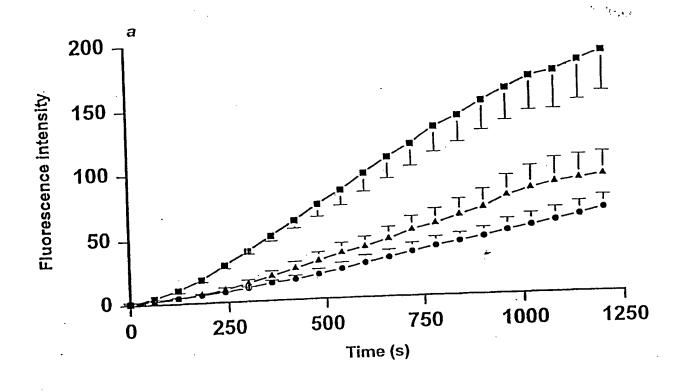
3 2 200 250 300 350 400 CM position from pter

FIG. 7B









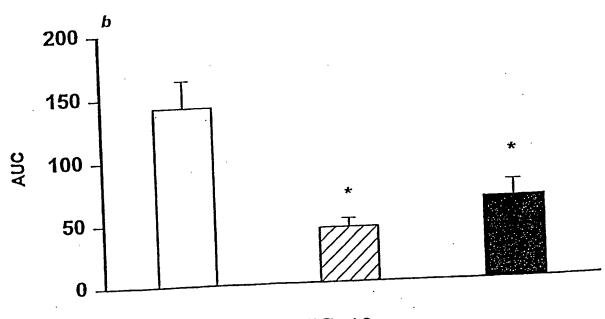


FIG. 12

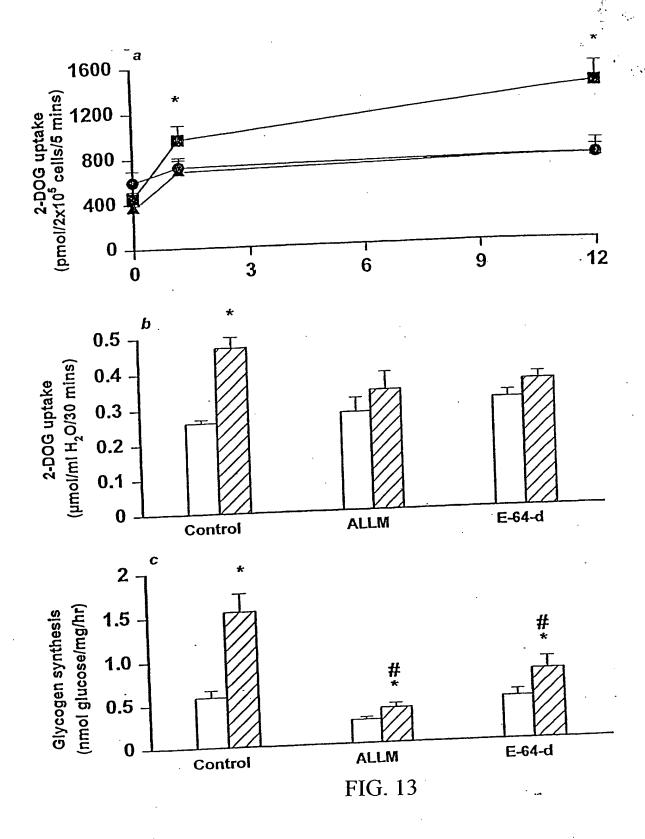


Fig14 Effect of 48 hours exposure of islets to calpain inhibitors on insulin secretion

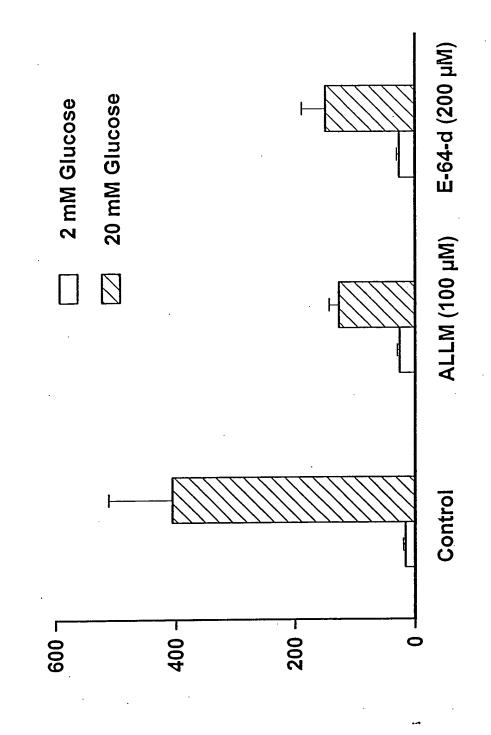


Fig 15 Insulin content in 48 hour cultured islets (n=4)

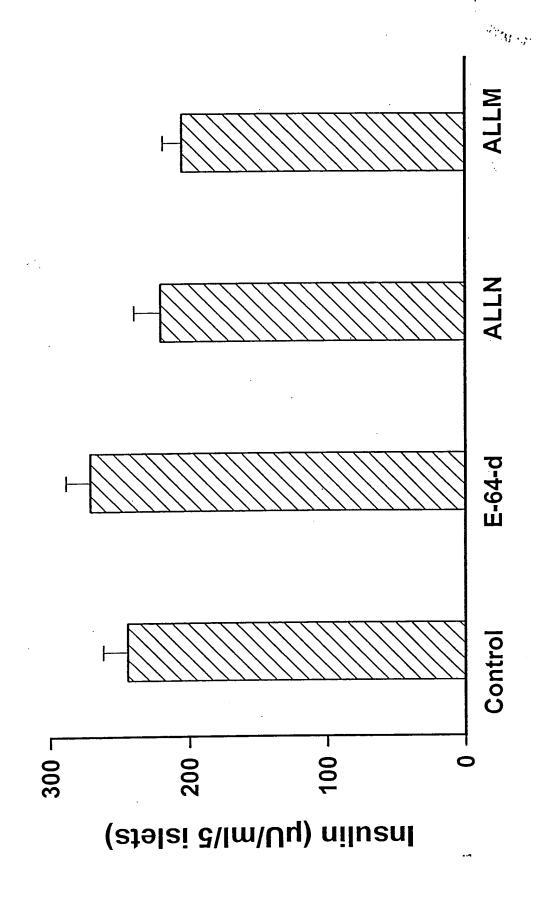
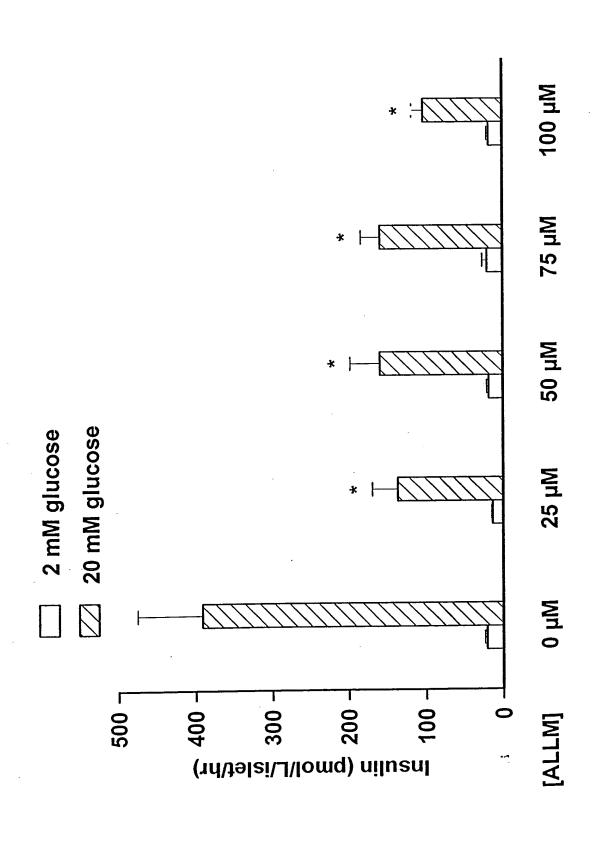
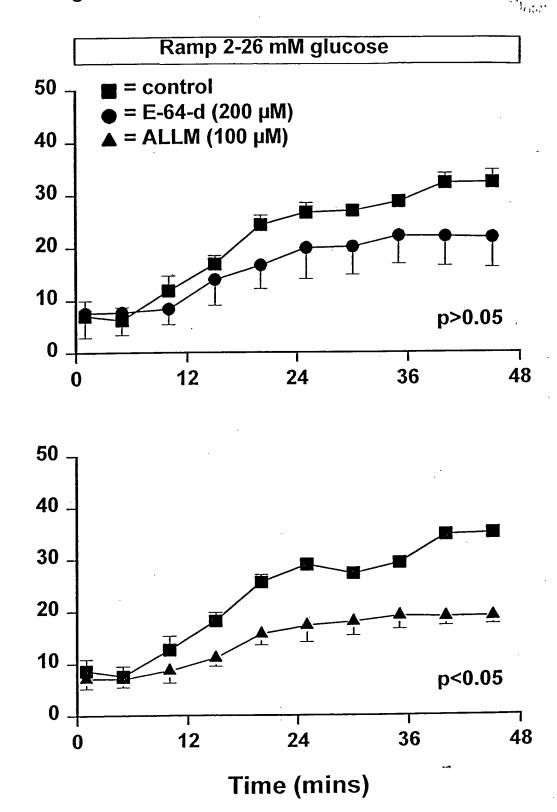


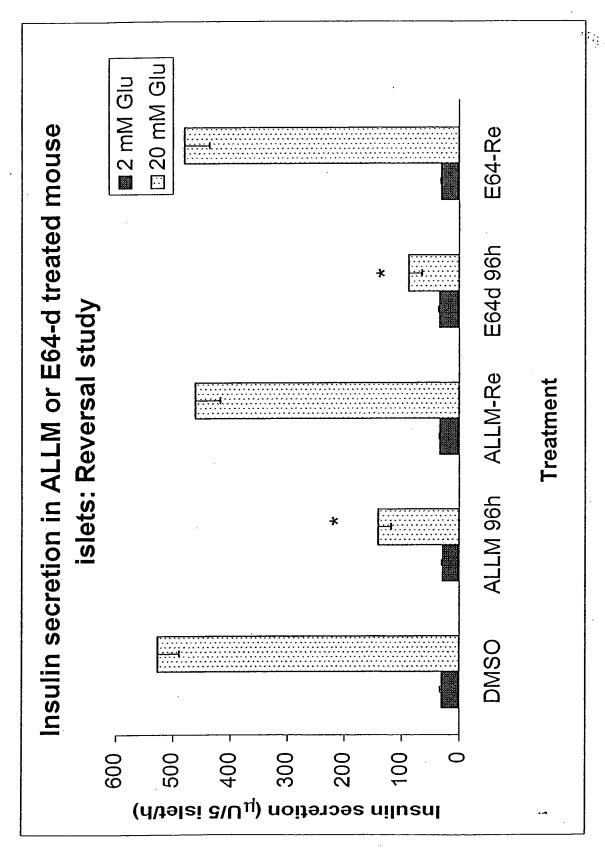
Fig16 ALLM dose response in 48 hour treated islets



Insulin (µU/ml/50 islets)

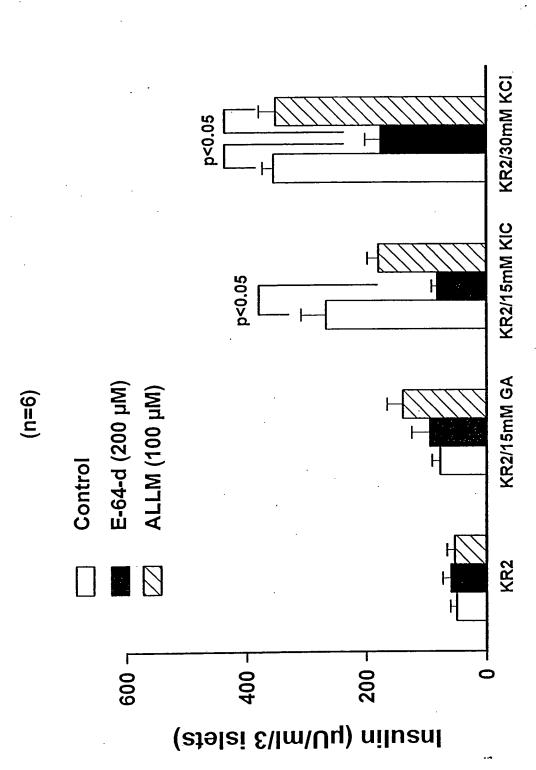
Fig 17. Perifusion of 48 hour cultured islets (n=4)

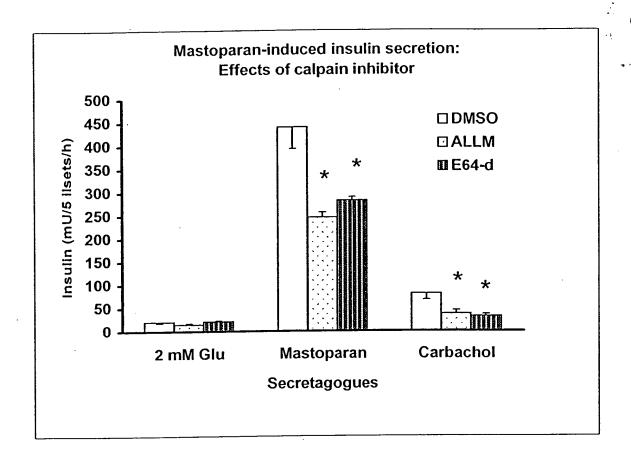




F19.10

Fig 19, Insulin secretion by islets following exposure to calpain inhibitors for 48 hrs





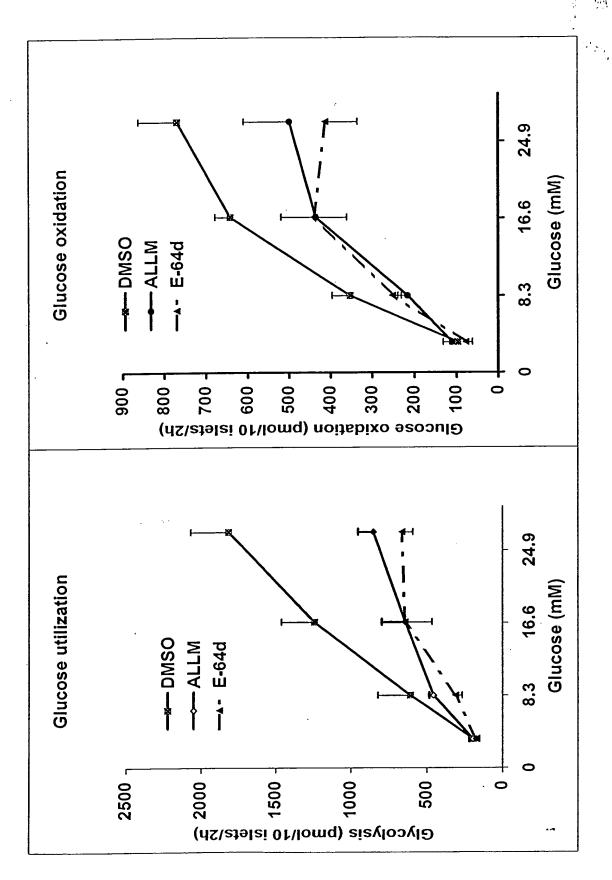
F14.20

Fig21 [C 2+], responses to gluce 3, KIC and KCI Control (n=5) E-64-d (n=2) **ALLM (n=5) 500** -400 300 200 100 0 30 mM KCI 14 mM Glucose 15 mM KIC Time to 1/2 max response (s) **500** 400 -**300** -**200** -100 -0

15 mM KIC

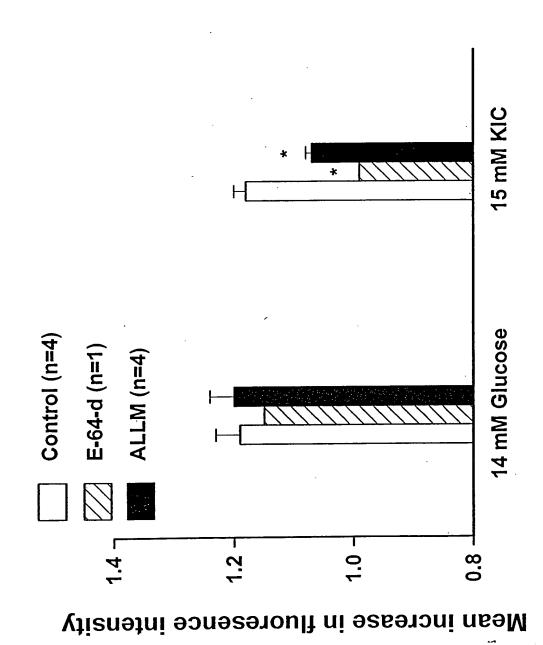
30 mM KCI

14 mM Glucose



F16.22

Fig 23. NAD(P)H responses to glucose and KiC



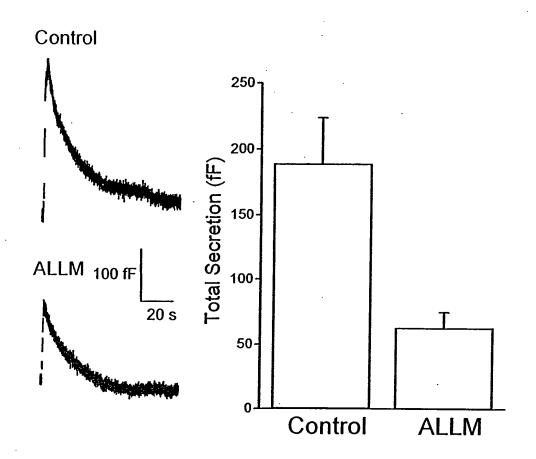
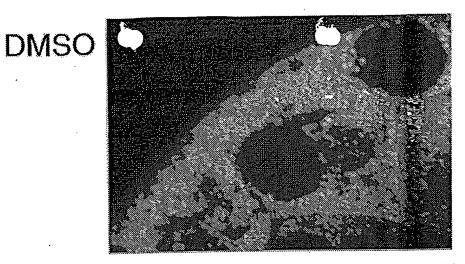
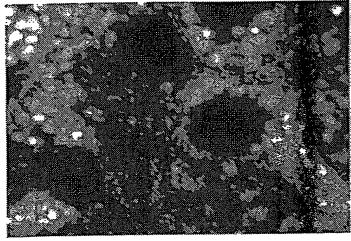


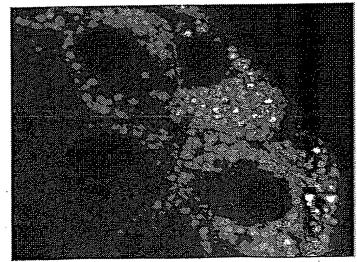
Fig. 24. Measurement of membrane capacitance in isolated β -cells



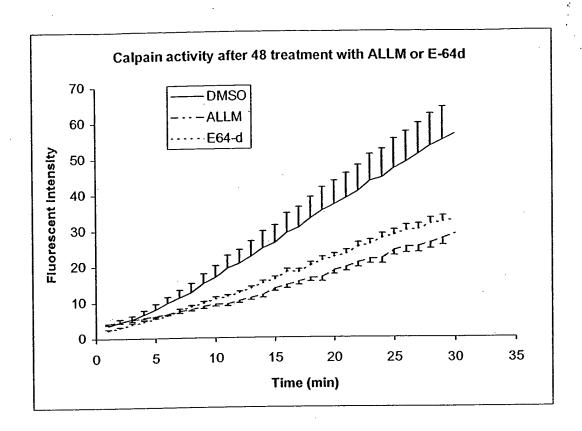
E64d



ALLM



F14.25



F16.26